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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,022	09/28/2001	Peter G. Raeth	1604-384A	4199
22442	7590	09/21/2004	EXAMINER	
SHERIDAN ROSS PC 1560 BROADWAY SUITE 1200 DENVER, CO 80202			HIRL, JOSEPH P	
			ART UNIT	PAPER NUMBER
			2121	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/967,022

Applicant(s)

RAETH ET AL.

Examiner

Joseph P. Hirl

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>20010928</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-35 are pending in this application.

Drawings

2. The drawings are objected to for the following reasons:

Figures 11 and 13 cannot be read because of the shading which must be removed to facilitate readability.

Claim Objections

3. Claim 1 has statements that do not convey clear meaning.

Claim 1, lines 8-9, cite: "...predictions P_1 and P_2 (a1) through (a3) following hold:"

Claim 1, lines 29-30, cite: "...predictions P_3 and P_4 (b1) through (b3) following hold:"

These objections must be corrected.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 21

Notation use to designate important events, models and predictions is either silent or inconsistent with the specification. Specifically events: E_1 and E_2 . Concerning predictions P_1 , P_2 , etc., the specification at page 4, lines 8-11 associates P_E with Prediction Error; the specification at page 22, line 13, identifies P as a prediction; the specification at page 57, line 18, identifies P as a prediction machine. The specification does not define P_1 , P_2 , P_3 , P_4 .

Claims 2-20

These claims depend from claim 1 and do not render clarification.

Claims 22, 23

These claims depend from claim 21 and do not render clarification.

Claim 24

The term "threshold" is used many times throughout the specification and on page 34, lines 3-4: "Further, note that the setting of the four thresholds ST , DT , $RtNST$ and $RtNDT$ is related to the desired sensitivity of an embodiment of the present invention." The specification does not identify a threshold " V ". Also, C_M is not identified in the specification. On page 1, line 18 C is defined as a constant.

Claims 25-34

These claims depend from claim 24 and do not render clarification.

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Claim 35

The specification at page 60, line 22 identifies "ds" but there is no "ds_A". The Abstract identifies data sample "S" which would be different from the "corresponding series S_M". In this claim "V" is identified as variance whereas in above claim 24 it was threshold.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification is silent on the use of an output by the predictor model M to detect an event E which is detected by the detection system.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1, 2, 4, 7-22, 24-31, and 33-35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the

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claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. While the example maybe trivial, the subject claims can be implemented with pencil and paper. Specifically, the methodology of the subject claims must be embodied in the technological arts.

Examination Considerations

10. The claims and only the claims form the metes and bounds of the invention.

"Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

11. Examiner's Opinion: Para 10 applies. The claims must track the specification and as pointed out above, the claims seem to just go off without regard to the nomenclature that was used in the specification. For sure the claims and only the claims establish the

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metes and bounds of the invention. The examiner is of the opinion that the prior art of Klimasauskas (U.S. 6,278,962) under 35 USC 102(e) anticipates the applicant's invention. While the Examiner reviewed each claim in relation to Klimasauskas, the claim uncertainty as identified above prevented a full analysis. The Examiner believes that if the claims are corrected but not significantly revised, the general prior art of process control is fully applicable to this disclosure. An allowance can only come about if the applicant tailors the claims to a very specific and well-defined concept.

Conclusion

12. The prior art of record and not relied upon is considered pertinent to applicant's disclosure.

- Klimasauskas, U. S. Patent, 6,110,214
- Klauber et al, U.S. Patent 5,869,752
- Harrison, U.S. Patent 6,301,572

13. Claims 1-35 are rejected.

Correspondence Information

14. Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner, Joseph P. Hirl, whose telephone number is (703) 305-1668. The Examiner can be reached on Monday – Thursday from

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6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anthony Knight can be reached at (703) 308-3179.

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,

Washington, D. C. 20231;

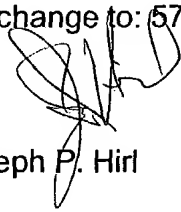
or faxed to:

(703) 746-7239 (for formal communications intended for entry);

or faxed to:

(703) 746-7290 (for informal or draft communications with notation of "Proposed" or "Draft" for the desk of the Examiner).

Note: During the last two weeks of October 2004, Art Unit 2121 will move to Carlyle, Randolph Building, 5th floor and my phone and fax number will change to: 571-272-3685 and 571-273-3685, respectively. Similarly, Anthony Knight's phone and fax numbers will change to: 571-272-3687 and 571-273-3687.



Joseph P. Hirl

September 16, 2004